

**From:** [Casey, Carolyn](#)  
**To:** [Elliot Steinberg](#); [Ronald W. Ruth](#)  
**Cc:** [St. Fleur, Marilyn](#); [Johnson, Stephen \(DEP\)](#); [Wainberg, Daniel](#)  
**Subject:** RE: Approach for Former USM South Parcel  
**Date:** Thursday, September 19, 2013 8:17:00 AM  
**Attachments:** [2013 0909 USM South Approach-f.pdf](#)  
[Slag sampling results review.docx](#)

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Has a fence been installed to prevent access to the slag yet?

Regarding no further action as the proposed approach for human health, I reviewed the 1997 A3 RAO and Appendix C contained in the QAPP Data Summary Report, again. I do not see any mention of this area of concern or slag in the 1997 report. The RAO does not discuss or evaluate this area nor does it indicate that any sampling took place in this area. It's not clear how this area could have been included in the risk assessment or was addressed by the RAO. This area is accessible and waste is at the surface. Direct exposure and incidental ingestion by recreators are a concern. The area needs to be evaluated from both a human health and an ecological perspective. Again, please refer to the attached comments.

The Human Exposures Under Control Environmental Indicator (HEC EI) failed to note that there are exposed soils/sediments and slag. There are elevated levels of lead and PAHs above the I/C RSLs. The HEC EI does not discuss or properly evaluate exposure to recreational users of this area. The claim that asphalt, a protective cover and/or a fence prevents access is inaccurate. The fence is open and the banks of the river are easily accessible and somewhat inviting due to it being on the river and due to the adjacent walking trail and park. There is no protective cover or asphalt along the banks of the river. No evidence of fishing was observed and the area is not likely to draw recreators for extensive swimming and sun bathing but access is easy and there is no posting to prohibit any activities. Due to the tidal influence, the area and waste is not always accessible.

The HEC EI relies heavily on the 1991 Phase II Comprehensive Site Assessment completed under the MCP for the adjacent Stop & Shop portion of the southern parcel only. That work did not extend to this area and no one has indicated that they were even aware of this waste prior to evaluation of the HEC EIs.

The summary statistics for the lead concentrations do not include the concentration of 36,000 ppm in soil/sediment which is contributed to red lead paint from boat bottoms. There is a Yacht Club behind Stop & Shop and adjacent to and just down river from the area of slag disposal. The duplicate result for this sample showed 2000 ppm lead and the rest of the 11 soil/slag samples had results less than 400 ppm. Arsenic and PAHs in soil and slag may be as or more prevalent than lead and may be the human health risk drivers.

Again, and in addition to the ecological risk assessment, please provide a human health risk evaluation for this area within 30 days.

Thank You,  
Carolyn

Carolyn J. Casey  
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**From:** Steinberg, Elliot [<mailto:ESteinberg@haleyaldrich.com>]  
**Sent:** Monday, September 09, 2013 4:16 PM  
**To:** Casey, Carolyn  
**Cc:** Ronald W. Ruth  
**Subject:** Approach for Former USM South Parcel

Carolyn,

Please see attached Memorandum presenting a workscope for preparation of an Eco Checklist and approach for further discussion of MCP issues. We look forward to hearing from you.

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Cut and pasted email from C. Casey to Ron Ruth 8/12/13

Since I still have not yet received any additional information, I am sending my latest comments along. Again, we are requesting that the ecological scoping check list be completed for the site. Please submit the checklist within 30 days. We should also discuss the issue of whether or not these are reportable concentration and what if any follow-up needs to be done with the MassDEP (see comment 4 below).

- 1) I was in the area of the former USM south parcel the other day and took a quick look at the area adjacent to the boat club to verify that the fencing was installed as indicated on our 5/14 conference call. I did not see any changes to the fencing and the area where the slag was observed is still very accessible, particularly at low tide.

We do consider the fencing necessary in order to document that human exposures are under control. The fencing, which would prevent direct access and potential exposure, is considered sufficient for documentation of the HEC EIs and is in lieu of any actual

risk assessment that would evaluate a recreational user exposure. Please note that fencing alone would not be an acceptable permanent remedy.

- 2) I was not provided any additional information on the 5/14 call or following the call that would obviate the need to conduct ecological risk assessment. As previously requested, please complete the ecological scoping checklist.

Regarding the information that I was told would be provided, is the following from the MCP what was being referred to on the 5/14 call? Our current understanding is that waste material is from the drop forge process, so I am not sure how this is relevant.

*40.0006: continued*

*Audit Follow-up Plan means a plan prepared by an LSP or the Consultant-of-Record pursuant to 310 CMR 40.1100 to confirm, demonstrate or achieve compliance with M.G.L. c. 21E and/or the MCP.*

*Background means those levels of oil and hazardous material that would exist in the absence of the disposal site of concern which are either:*

- (a) ubiquitous and consistently present in the environment at and in the vicinity of the disposal site of concern; and attributable to geologic or ecological conditions, or atmospheric deposition of industrial process or engine emissions;*
- (b) attributable to coal ash or wood ash associated with fill material;*
- (c) releases to groundwater from a public water supply system; or*
- (d) petroleum residues that are incidental to the normal operation of motor vehicles.*

OR

*40.0317: Releases and Threats of Release Which Do Not Require Notification*

*Notwithstanding the provisions of 310 CMR 40.0311 through 40.0315, the following releases and threats of release of oil and/or hazardous material are exempt from the notification requirements set forth in 310 CMR 40.0300:*

*....*

*(9) releases of oil and/or hazardous material related to coal, coal ash, or wood ash, excluding wood ash resulting from the combustion of lumber or wood products that have been treated with chemical preservatives;*

- 3) The QAPP stated that “In addition, microscopy analyses may be conducted for up to 6 selected “slag” samples in an effort to distinguish between “slag” and products of coal combustion. These analyses will be performed by MicroVision Laboratories of Chelmsford, MA.” Was this conducted? If so, please provide the results with interpretation. If not, why?
- 4) As stated on page 4 of the Data Summary Report, “An additional objective of the QAPP was to provide data for assessment of the slag leachability. Comparison of the detected concentrations in corresponding slag and soil samples at each location does not show trends of higher concentrations in the slag as compared to the soil. Therefore the slag material is not considered a source material to constituents detected in the

adjoining soil, and leaching from the slag is not considered an issue of concern.”

Contrary to the above statement, concentration in some of the slag samples are greater than in the corresponding soil sample.

Regarding our previous discussions of SPLP and TCLP, SPLP has no relevance in the MassDEP program.

No TCLP or SPLP analysis was conducted in order to evaluate leachability. It not clear how leaching is determine by a comparison of one mass concentration to another. The waste material located here is very heterogeneous so comparison of concentrations in a soil sample to a slag sample may not be representative. Comparison of which COCs were detected in slag as compared to soil, on the other hand, would be relevant qualitative information.

Regarding characterization of the waste, the data indicates that the material is a hazardous material based on the mass analyses compared to 310 CMR 40.1600, S1 reportable concentrations for lead, arsenic and several PAHs. Since the previous RTN was closed for the site, if necessary, the option is to reopen it or to start a new RTN. Please refer to the attached email, below.

- 5) Regarding background sampling, EPA can provide support in the selection of background locations as necessary.

Thanks  
Carolyn

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**From:** Carolyn Casey [<mailto:Casey.Carolyn@epamail.epa.gov>]  
**Sent:** Tuesday, May 14, 2013 3:11 PM  
**To:** Casey, Carolyn  
**Subject:** Fw: TCLP or SPLP

----- Forwarded by Carolyn Casey/R1/USEPA/US on 05/14/2013 03:10 PM -----

From: Carolyn Casey/R1/USEPA/US  
To: "Ani E. Ajemian" <[AEAjemian@sherin.com](mailto:AEAjemian@sherin.com)>, "Steinberg, Elliot" <[ESteinberg@haleyaldrich.com](mailto:ESteinberg@haleyaldrich.com)>  
Cc: Marilyn StFleur/R1/USEPA/US@EPA  
Date: 01/05/2012 03:22 PM

I just spoke with Paul Locke, the Division Director of Response and Remediation at the Mass DEP Bureau of Waste Site Cleanup. He was at our office to provide an overview of the MCP so thought I should take the opportunity to ask him.

He said the mass analysis will provide us with the information we need to determine if the slag material would be defined as a hazardous material. So, there is no need for the TCLP at this point. He also said that if the material is hazardous, that you would have the choice of opening up the existing RTN or starting a new one.

Sorry for creating so much confusion with this issue but obviously it's worth asking why are we doing this analysis and what are we going to do with the results. If you still want to do SPLP analysis that is fine but we don't feel it's necessary and are still not sure how we'd use it.

Please let me know if we need to discuss further or if we need to discuss any of the additional comments Marilyn passed along in the email dated 12/8 and comments 2 and 3 in the 12/12 email.

If no further discussion is needed, could you please provide us with a time frame for when the revised WP/QAPP will be submitted.

Thanks

Carolyn

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